

II. AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) Process for the production of producing granular sodium percarbonate by fluid-bed spray granulation, the process comprising:

(1) spraying wherein

(i) an aqueous sodium carbonate solution or sodium carbonate suspension, and

(ii) an aqueous hydrogen peroxide solution, and

(iii) ~~in the presence of~~ at least one stability-enhancing additive

~~is sprayed~~ into a fluid bed containing sodium percarbonate particles; and

(2) evaporating water at the same time ~~water is evaporated~~ at a fluid bed temperature ~~within~~ the range of from 40°C to 95°C,

wherein characterised in that

the additive ~~used~~ is

(i) a magnesium compound in an amount ~~a quantity of~~ from 50 to 2,000 ppm Mg^{2+} and/or

(ii) 50 ppm to 2000 ppm of a chelate complexing agent selected from the group consisting of among the hydroxycarboxylic acids, aminocarboxylic acids, aminophosphonic acids, phosphonocarboxylic acids, hydroxyphosphonic acids, and the alkali metal salts thereof, ammonium salts thereof, and or magnesium salts thereof of the above mentioned acids, in a quantity of 50 to 2,000 ppm,

wherein the quantity of the magnesium compound and the chelate complexing agent are used in each case being based on the sodium percarbonate to be produced, and wherein the additive does not contain a combination of a magnesium salt and a condensed phosphate being excepted.

Claim 2. (Currently Amended) The process ~~Process~~ according to claim 1, wherein the magnesium compound is a magnesium sulfate, a magnesium acetate, or a magnesium salt of a chelate complexing agent, in an amount of from 100 ppm to 1000 ppm Mg^{2+}

~~characterised in that~~

~~a water soluble Mg compound, in particular an Mg sulfate, Mg acetate or Mg salt of a chelate complexing agent, is used in a quantity of 100 to 1000 ppm~~ Mg^{2+} , ~~in particular 200 to 1000 ppm.~~

Claim 3. (Currently Amended) The process ~~Process~~ according to claim 1 ~~or~~ 2, wherein the magnesium compound is added to the aqueous hydrogen peroxide solution characterised in that
~~the Mg compound is added to the aqueous H₂O₂ solution to be sprayed.~~

Claim 4. (Currently Amended) The process ~~Process~~ according to claim one of claims 1 to 3,
~~characterised in that~~
a wherein the complexing agent is selected from the group consisting of among
nitrilotriacetic acid, iminodiacetic acid, ethylenediaminetetraacetic acid, iminodisuccinate,
tartaric acid, gluconic acid, aminotri(methylene)phosphonic acid,
ethylenediaminetetra(methylene)phosphonic acid,
diethylenetriaminepenta(methylene)phosphonic acid, ~~tri-, tetra-, penta- and~~
trimethylenetetra(methylene)phosphonic acid, tetramethylenetetra(methylene)phosphonic
acid, pentamethylenetetra(methylene)phosphonic acid,
hexamethylenetetra(methylene)phosphonic acid, and 1-hydroxyethane-1,1-diphosphonic
acid, sodium salts thereof, potassium salts thereof, and magnesium salts thereof or an Na-, K-
or Mg salt of the above-mentioned acids is used.

Claim 5. (Currently Amended) The process ~~Process~~ according to claim one of claims 1 to 4,
~~characterised in that~~
a wherein 100 ppm to 1000 ppm of the complexing agent is used in a quantity within the
range of 100 to 1,000 ppm, in particular 200 to 1,000 ppm, and this is added to any one of the
aqueous hydrogen peroxide solution, the aqueous sodium carbonate solution, or the sodium
carbonate suspension H₂O₂ solution and/or soda solution or soda suspension.

Claim 6. (Currently Amended) The process ~~Process~~ according to claim one of claims 1 to 5,
~~characterised in that~~
in addition further comprising waterglass having an SiO₂/Na₂O module ~~in the range of from 1~~
to 3 in an amount corresponding to 0.1 wt.% to 1 wt.% SiO₂, based on sodium percarbonate
3, in particular 1 to 2, in a quantity corresponding to 0.1 to 1 wt.%, in particular 0.1 to 0.5
wt.% SiO₂, based on sodium percarbonate, is used as a stabiliser.

Claim 7. (Currently Amended) The process ~~Process~~ according to claim one of claims 1 to 6,
~~characterised in that~~

~~a wherein the spraying comprises 30 to 75 wt.% aqueous H₂O₂ solution and a soda solution or soda suspension having an Na₂CO₃ content within the range of 20 to 60 wt.%, in particular 30 to 50 wt.%, of which at least one of the solutions or the suspension contains an additive from among the Mg compounds and/or above-mentioned chelate complexing agents are sprayed using a three- or four-component atomising nozzle with external mixing, the nozzle further and comprising a central pipe with and two or three jacketed pipes disposed around it, wherein with the central pipe extends extending beyond the jacketed pipes by 2 to 10 times a the radius of the central pipe.~~

Claim 8. (Currently Amended) Granular sodium percarbonate comprising percarbonate, characterised by

- (i) a grain structure obtainable by fluid-bed spray granulation,
 - (ii) a magnesium compound in an amount of from 50 ppm to 2000 ppm Mg²⁺ and/or 50 ppm to 2000 ppm substantially evenly distributed in the grain, ~~a content of a magnesium compound in a quantity of 50 to 2,000 ppm Mg²⁺ and/or a content of~~
 - (iii) one or more chelate complexing agents selected from the group consisting of from among the hydroxycarboxylic acids, aminocarboxylic acids, aminophosphonic acids, phosphonocarboxylic acids, hydroxyphosphonic acids, ~~and the alkali metal salts thereof, ammonium salts thereof, and magnesium salts thereof of the above-mentioned acids in a quantity of 50 to 2,000 ppm, excepting wherein the sodium percarbonate does not contain a combination of an Mg salt and a condensed phosphate, and~~
- wherein the granular sodium percarbonate has a TAM value of equal to or less than 8 µW/g measured after 48 hours at 40°C than 8 µW/g, in particular less than 7 µW/g, measured after 48 h at 40°C.

Claim 9. (Currently Amended) The granular Granular sodium percarbonate according to claim 8, further comprising characterised in that it has a single-layer or multilayer stabilising coating consisting of one or more hydrate-forming salts.

Claim 10. (Currently Amended) The granular Granular sodium percarbonate according to claim 8 or 9, characterised in that

~~in addition further comprising~~ waterglass in an amount corresponding to a quantity within the range of 0.1 wt.% to 1 wt.% SiO₂ ~~is to 1 wt.% SiO₂, in particular 0.1 to 0.5 wt.% SiO₂, is~~ substantially evenly distributed in the grain.

Claim 11. (New) The granular sodium percarbonate of claim 10, wherein the amount corresponds to 0.1 wt.% to 0.5 wt.% SiO₂.

Claim 12. (New) The process of claim 2, wherein the amount is from 200 ppm to 1000 ppm.

Claim 13. (New) The process according to claim 5, wherein 200 ppm to 1000 ppm of the complexing agent is added.

Claim 14. (New) The process of claim 6, wherein the SiO₂/Na₂O module is from 1 to 2.

Claim 15. (New) The process of claim 6, wherein the amount corresponds to 0.1 wt.% to 0.5 wt.% SiO₂.

Claim 16. (New) The process of claim 7, wherein the aqueous sodium carbonate solution or sodium carbonate suspension has a Na₂CO₃ content of from 20 wt.% to 60 wt.% and the aqueous hydrogen peroxide solution has a concentration of 30 wt.% to 75 wt.%.

Claim 17. (New) The process of claim 16, wherein the aqueous sodium carbonate solution or sodium carbonate suspension has a Na₂CO₃ content of from 30 wt.% to 50 wt.%.

Claim 18. (New) The granular sodium percarbonate of claim 8, wherein the TAM value is less than 7 µW/g.

Claim 19. (New) The granular sodium percarbonate of claim 18, wherein the TAM value is from 4 µW/g to 6 µW/g.